

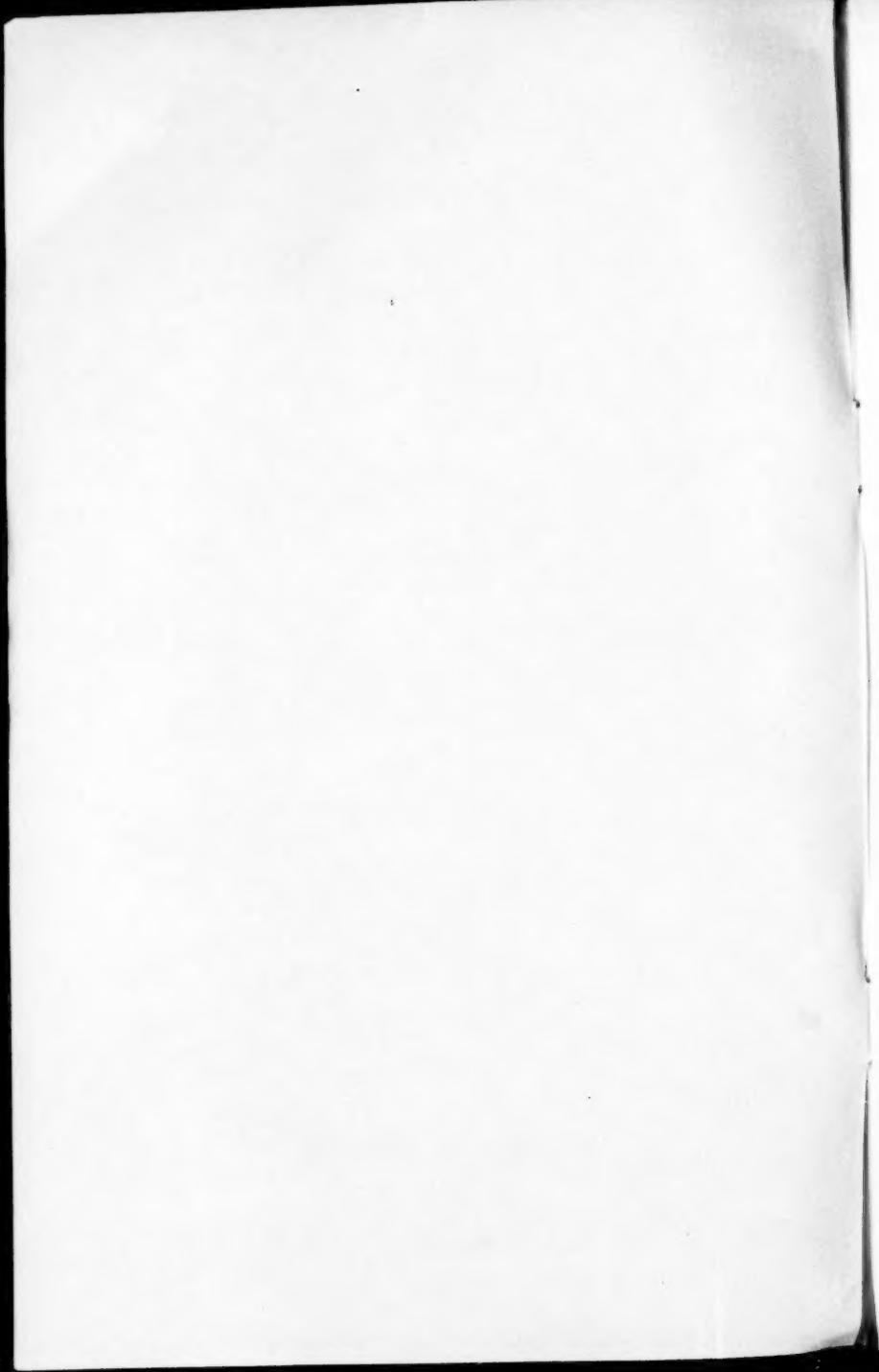
INDEX  
TO THE  
**MATHEMATICAL  
GAZETTE**

VOL. XLIII.

FEBRUARY 1959 TO DECEMBER 1959  
(Nos. 343-346)

TWO SHILLINGS AND SIXPENCE NET

LONDON  
G. BELL AND SONS, LTD.  
1959



THE  
MATHEMATICAL  
GAZETTE

VOL. XLIII.

FEBRUARY 1959 TO DECEMBER 1959  
(Nos. 343-346)

LONDON  
G. BELL AND SONS, LTD.  
1959

PRINTED IN NORTHERN IRELAND AT  
THE UNIVERSITIES PRESS, BELFAST

# INDEX

TO THE

## MATHEMATICAL GAZETTE

No. 343, FEBRUARY 1959-No. 346, DECEMBER 1959

- Articles.
- Branch News.
- Classroom Notes.
- Correspondence.
- Gleanings.
- Mathematical Notes.
- Obituary.
- Reviews.
- Miscellaneous.

---

### ARTICLES.

AUTHOR.	TITLE.	PAGE.
T. Bakos.	Octahedra inscribed in a Cube.	17
A. W. Bell.	The Science of Mechanics.	174
A. Burslem.	Subtraction.	171
W. F. Bushell.	The Keats of English Astronomy.	1
J. L. B. Cooper.	Functional Analysis.	102
H. M. Cundy.	Feuerbach's Theorem and the Rectangular Hyperbola.	21
	What is $\times$ ?	101
H. Davenport.	Dirichlet.	268
R. O. Davies.	On Langford's Problem.	253
D. B. Eperson.	Magic Square Patterns.	273
I. J. Good.	Pursuit Curves and Mathematical Art.	34
R. L. Goodstein.	Automorphic Numbers in a General Scale.	270
P. Grant.	<i>See</i> E. H. Lockwood.	
E. H. Lockwood.	Factors of Binomial Coefficients.	31
C. Mack.	The Application of Mathematics to Industry.	26
J. Mayr.	Week-days and Mathematics.	81
K. Menger.	Gulliver in the Land without One, Two, Three.	241
M. H. A. Newman.	What is Mathematics?	161
S. J. Palmer.	Mathematics in Warship Design.	256
A. R. Pargeter.	Plaited Polyhedra.	88
C. J. Pirday.	On Langford's Problem.	250
D. G. Tahta.	A 'Feuerbach' Problem.	23
P. L. Taylor.	The Engineer's Approach to Mathematics.	36
A. Wilanaky.	A Genesis for Binomial Identities.	176

## BRANCH NEWS.

BRANCH.	PAGE.	BRANCH.	PAGE.
Cardiff	(ii)	Nottingham and District	(v)
Exeter	(v)	Queensland	(iii)
Leicester and County	(ii)	Southampton and District	(vi)
Liverpool Mathematical Society	(iii)	South Wales Mathematical Association	(i)
New South Wales	(iii), (v)	Victoria	(vii)

## CLASSROOM NOTES.

Nos. 27-36 May 1959  
 37-42 October 1959  
 43-48 December 1959

AUTHOR.	No.	TITLE.	PAGE.
J. Bell.	29	Ptolemy's Theorem.	112
J. G. Brennan.	47	A discontinuous function.	299
R. Buckley.	36	On classroom Note 21.	119
A. L. Davies.	45	The condition for a pair of straight lines.	297
F. Gerrish.	31	Quadric: plane of the section having a given centre.	113
D. M. Hallowes.	35	The hypotenuse number.	118
P. Halsey.	40	The ambiguous case.	204
S. L. Ho.	46	Two equal angular bisectors determine an isosceles triangle.	298
E. J. Hopkins.	44	The teaching of logarithms.	295
O. R. Hulbert.	28	A proof by the ratio-formula with oblique axes.	111
L. W. H. Hull.	41	Convergence on the Argand diagram.	205
H. N. Jones.	48	Approximate construction for an ellipse with axes of given length.	300
G. R. Langdale.	32	The slide rule.	113
L. H. Le-Bon.	34	Comment on classroom Note 21.	118
E. H. Lockwood.	33	To draw a tractrix and a catenary.	117
A. J. Moakes.	42	The M-function: a note on the inequalities of the means of a set of positive numbers.	208
T. Nakazawa.	39	Cubic graphs.	203
E. J. F. Primrose.	30	Parabolic sections of a circular cone.	112
W. W. O. Slessenger.	37	Limits.	203
P. J. Smith.	27	'Peg-board' as a visual aid.	110
M. L. West.	38	The nine points circle.	203
R. F. Wheeler.	43	Notes on force, power and gravitational units.	290

## INDEX

v

## CORRESPONDENCE.

AUTHOR.	SUBJECT.	PAGE.
G. N. Copley.	<i>Re</i> the quantity calculus.	179
H. M. Cundy.	The Stroud system.	85
P. Curphay.	Frequency distribution of digits of $\pi$ .	178
N. A. Doe.	Frequency distribution of digits of $\pi$ .	39
A. W. Fuller.	The Pythagorean musical scale.	180
H. D. Grossman.	<i>Re</i> R. K. Guy, Gazette, May 1958.	38
M. D. Kelly.	<i>See</i> P. Curphay.	
P. Moffat.	<i>See</i> P. Curphay.	
E. H. Neville.	Radians.	40
J. A. Ogden.	<i>See</i> N. A. Doe.	
E. J. F. Primrose.	$\pi$ as a continued fraction.	179
A. Smith.	'Bridging the gap' between primary and secondary schools.	84
B. J. Vieri.	<i>See</i> N. A. Doe.	

## GLEANINGS.

Nos. 1925–1927	May 1959
1928–1932	October 1959
1933–1935	December 1959

## MATHEMATICAL NOTES.

Nos. 2819–2828	February 1959
2829–2848	May 1959
2849–2867	October 1959
2868–2873	December 1959

AUTHOR.	NO.	TITLE.	PAGE.
A. G. Azpeitia.	2849	On a certain type of complex integral.	181
L. Bankoff.	2867	Octahedron in a cube.	202
C. C. H. Barker.	2840	Schur's inequality.	127
B. Bolt and E. Wright.	2848	Representations of rational fractions.	132
A. V. Boyd.	2842	Great arcs and loxodromes.	128
H. M. Cundy.	2857	From a script.	191
	2873	The inextensible string.	288
D. Djoković.	2822	A relation between progressions.	44
T. Donnellan.	2866	Developments of the Argand Diagram.	201
J. H. Durran.	2846	Some identities.	131
S. G. Emslie.	2868	The area of the pedal triangle.	276
A. H. Finlay.	2828	On the trisection of an angle.	50

## THE MATHEMATICAL GAZETTE

AUTHOR.	No.	TITLE.	PAGE.
	2830	Halves and thirds again.	123
	2858	A travelling triangle.	102
	2863	Zig-zag paths.	199
T. M. Flett.	2870	An example on term-by-term differentiation of infinite series.	278
V. W. Foss.	2824	Centre of gravity of a quadrilateral.	46
D. Gadd.	2872	A construction for the graphical solution of spherical triangles.	283
G. A. Garreau.	2847	Diophantine quadratics.	132
F. Gerrish.	2853	Common root of two polynomial equations.	188
R. L. Goodstein and M. Rumney.			
G. A. Guillotte.	2856	On the resultant of two quadratic forms.	191
R. K. Guy.	2865	Missing digits.	200
J. B. Homer.	2832	The Simpson line and the cardioid.	123
L. W. H. Hull.	2854	An approximation to $(a^2 + b)^{\frac{1}{2}}$ .	189
	2827	Linear differential equations with constant coefficients.	48
J. A. H. Hunter.	2843	A Diophantine equation.	130
D. Keeton.	2855	On Note 2825.	190
C. D. Langford.	2829	Dominoes numbered in the corners.	120
	2861	A curious dissection of a square.	198
	2864	A chess-board puzzle.	200
B. E. Lawrence.	2833	Proofs that $2^{2^n} + 1$ is composite.	123
E. A. Maxwell.	2831	An examination question.	123
D. S. Mitrinovic.	2821	A summation formula.	44
	2835	A theorem on prime numbers.	125
	2836	Equivalence of two sets of inequalities.	126
	2837	Problème sur les progrésions arithmétiques.	126
	2838	Problème sur une équation fonctionnelle.	126
E. H. Neville.	2852	When found, make a Note of.	187
R. North.	2859	Maximising a determinant.	193
D. H. Parsons.	2862	The distributive law for vector multiplication.	198
E. J. F. Primrose.	2869	Note on Pell's equation.	277
A. K. Rajagopal.	2823	On a certain differential equation.	45
M. Rumney.		<i>See</i> R. L. Goodstein.	
D. G. Tahta.	2841	On Note 2776.	128
E. J. Ternouth.	2839	The contour integral of a derivative.	127
K. Toman.	2825	A note on the minimum property of the circle.	46
C. O. Tuckey.	2834	A walk in the rain (Note 2721).	124
G. Tyson.	2851	Trials of a trisector.	184
E. W. Wallace.	2844	A test for divisibility by 7.	130
C. Walmsley.	2860	On Note 2796.	197
G. N. Watson.	2871	A quadruple integral.	280
E. Wright.		<i>See</i> B. Bolt.	
A. C. Zitronenbaum.	2845	Bisecting an area and its boundary.	130
A. Zulauf.	2819	Note on the expression $x_k/(x_k + x_{k+1})$ .	42
	2820	Note on some inequalities.	42
	2850	On a conjecture of L. J. Mordell, II.	182

## OBITUARY.

Miss F. M. A. Pendry.	by V. W. Gooderham.	37
W. C. Fletcher.	by A. W. Siddons.	85
	and by J. Strachan.	87

## REVIEWS.

AUTHOR.	TITLE.	REVIEWER.	PAGE.
R. L. Ackoff.	<i>See</i> C. W. Churchman.		
P. P. Adam.	Didactica Matematica Euristica.	T. J. Fletcher.	135
I. Adler.	The New Mathematics.	R. L. Goodstein.	314
Albrecht.	<i>See</i> Baur.		
Atkin.	Mathematics and Wave Mechanics.	D. ter Haar.	68
J. S. Ames and M. D. Murnaghan.	Theoretical Mechanics.	Brief mention.	320
R. V. Andree.	Selections from Modern Abstract Algebra.	R. L. Goodstein.	313
J. W. Archbold.	Algebra.	T. A. A. Broadbent.	142
E. L. Arnhoff.	<i>See</i> C. W. Churchman.		
H. Arzelies.	La Dynamique Relativiste et ses Applications.	W. H. McCrea.	148
A. Barton.	An Introduction to Coordinate Geometry.	E. J. F. Primrose.	211
J. Bass.	Cours de Mathématiques.	R. L. Goodstein.	70
Baur, Lode and Albrecht.	Anschauliche Geometrie. I Teil: Geometrie.	E. J. F. Primrose.	318
Beatley.	<i>See</i> Birkhoff.		
M. Beberman.	An Emerging Programme of Secondary School Mathematics.	R. L. Goodstein.	211
O. Becker.	Grundlagen der Mathematik in Geschichtlicher Entwicklung.	A. Prag.	153
R. Bellman.	Dynamic Programming.	S. Vajda.	307
E. W. Beth.	La Crise de la Raison et la Logique.	R. L. Goodstein.	219
Birkhoff and Beatley.	Basic Geometry.	H. M. Cundy.	134
B. Bleaney.	<i>See</i> B. I. Bleaney.		
B. I. Bleaney and B. Bleaney.	Electricity and Magnetism.	G. Temple.	229
R. P. Boas and R. C. Buck.	Polynomial Expansions of Analytic Functions.	A. J. Macintyre.	235
Boot and Dakin.	Fundamental Building Mathematics. II.	M. Bridger.	319
F. Bowman.	Introduction to Bessel Functions.	Brief Mention.	319
N. Bourbaki.	Éléments de Mathématique XXI.	D. M. Stone.	228
L. Brand.	Vector Analysis.	A. Talbot.	141

AUTHOR.	TITLE.	REVIEWER.	PAGE.
I. Bronstein and K. Semendjagew.			
G. S. Brown.	Taschenbuch der Mathematik.	R. L. Goodstein.	230
E. T. Browne.	Probability and Scientific Inference.	R. L. Goodstein.	64
R. H. Bruck.	Introduction to the Theory of Determinants and Matrices.	W. L. Ferrar.	303
R. C. Buck.	A Survey of Binary Systems.	P. M. Cohn.	234
J. W. S. Cassels.	See R. P. Boas.		
J. Chauvineau.	An Introduction to Diophantine Approximation.	K. Mahler.	159
C. Chevalley.	La Logique Moderne.	R. L. Goodstein.	65
C. W. Churchman.	Fundamental Concepts of Algebra.	D. Rees.	75
L. H. Clarke.	Introduction to Operations Research.	S. Vajda.	227
P. M. Cohn.	Ordinary Level Mathematics.	A. W. Bell.	303
T. G. Connolly and W. Sluckin.	Linear Equations.	R. L. Goodstein.	140
H. S. M. Coxeter.	Statistics for the Social Sciences.	F. Conway.	146
H. S. M. Coxeter and W. O. J. Moser.	Non-Euclidean Geometry.	E. J. F. Primrose.	57
S. H. Crandall.	Generators and Relations for Discrete Groups.	K. Hirsch.	149
Dakin.	Engineering Analysis.	T. H. O'Beirne.	157
B. Davison and J. B. Sykes.	See Boot.		
A. Denjoy.	Neutron Transport Theory.	J. Howlett.	221
P. Dienes.	Un Demi-siècle de Notes Communiquées aux Académies.	W. K. Hayman.	72
G. Doetsch.	The Taylor Series.	R. L. Goodstein.	222
D. Dugué.	Handbuch der Laplace-Transformation.	J. L. B. Cooper.	66
C. V. Durell.	Traité de Statistique théorique et Appliquée.	R. L. Plackett.	310
C. E. Easthope.	Certificate Mathematics.	L. D. Hurdige.	214
A. R. Edmonds.	Three Dimensional Dynamics.	E. V. Whitefield.	316
J. Favard.	Angular Momentum in Quantum Mechanics.	H. C. Bolton.	157
O. F. Fischer.	Cours de Géométrie Différentielle Locale.	T. J. Willmore.	57
P. B. Fischer.	Five Mathematics Structural Models in Natural Philosophy with Technical Physical Quaternions.	S. A. Stigant.	60
C. Flammer.	Arithmetik.	R. L. Goodstein.	225
R. Fleming.	Spheroidal Wave Functions.	A. Fletcher.	217
L. Fox.	See L. Saunders.		
P. Franklin.	The Numerical Solution of Two-point Boundary Problems in Ordinary Differential Equations.	S. C. R. Dennis.	226
	An Introduction to Fourier Methods and the Laplace Transform.	Brief Mention.	319
	Functions of Complex Variables.	T. A. A. Broadbent.	232

## INDEX

ix

AUTHOR.	TITLE.	REVIEWER.	PAGE.
D. A. S. Fraser.	Nonparametric Methods in Statistics.	F. Downton.	67
M. and I. Freeman.			
I. M. Gelfand.	Fun With Geometry. Unitäre Darstellungen der klassischen Gruppen.	H. M. Cundy. P. M. Cohn.	143 62
S. Gill.	See M. V. Wilkes.		
S. Golab.	Rachunek Tensorowy.	R. F. Mailak.	307
S. Goldberg.	Introduction to Difference Equations.	R. L. Goodstein.	216
S. H. Gould.	Variational Methods for Eigenvalue Problems.	C. Fox.	154
R. Gouyon.	Précis de Mathématiques Spéciales.	R. L. Goodstein.	70
J. A. Green.	Sequence and Series.	R. L. Goodstein.	140
U. Grenander and G. Szego.	Toepplitz Forms and their Applications.	J. L. B. Cooper.	233
G. Grosche.	Projektive Geometrie.	E. J. F. Primrose.	79
K. P. Grottemeyer.	Analytische Geometrie.	E. J. F. Primrose.	151
A. Grzegorezyk.	Zagadnienia.	R. L. Goodstein.	219
G. T. Gilbaud.	What is Cybernetics?	R. L. Goodstein.	314
W. Haack.	Darstellende Geometrie I.	F. T. Chaffee.	236
H. Hancock.	Theory of Elliptic Functions.	Brief Mention.	319
D. R. Hartree.	A Calculation of Atomic Structures.	J. Howlett.	152
F. Hausdorff.	Set Theory.	R. L. Goodstein.	218
J. Hausen.	25 Nobel Preisträger.	R. L. Goodstein.	231
Hayden.	See Lowry.		
J. Heading.	Matrix Theory for Physicists.	E. V. Whitfield.	317
L. Heffter.	Grundlagen und Analytischer Aufbau der Geometrie.	E. J. F. Primrose.	231
E. R. Heineman.	Plane Trigonometry.	F. E. Chettle.	139
K. A. Hesse.	The Four Rules of Measurement.	K. Sowden.	137
T. Ward Hill.	Elementary Calculations.	K. Sowden.	136
E. Hille and R. S. Phillips.			
P. J. Hilton.	Functional Analysis and Semi-groups.	J. L. B. Cooper.	238
J. E. Hoffman.	Differential Calculus.	R. L. Goodstein.	140
D. A. Holland.	Geschichte der Mathematik.	M. A. Hoskin.	144
	Oxford Graded Arithmetic Practice, 7.	K. Sowden.	137
	8.		215
N. Jacobson.	Structure of Rings.	B. H. Neumann.	73
J. A. Jenkins.	Univalent Functions and Conformal Mapping.	W. K. Hayman.	235
H. K. Justice.	See E. S. Smith.		
S. Kanger.	Provability in Logic.	R. L. Goodstein.	76
I. Kaplansky.	An Introduction to Differential Algebra.	G. Higman.	79
E. C. Kemble.	The Fundamental Principles of Quantum Mechanics.	Brief Mention.	320
M. Kervaire.	See A. Mercier.		
H. Kneser.	Funktionentheorie.	T. A. A. Broadbent.	232
A. I. Khinchin.	Mathematical Foundations of Information Theory.	B. C. Brookes.	309

## THE MATHEMATICAL GAZETTE

AUTHOR.	TITLE.	REVIEWER.	PAGE.
K. Knopp.	Grundlagen der Allgemeinen Theorie Analytischen Funktionen.	R. L. Goodstein.	65
R. Kochendorffer.	Determinanten und Matrizen.	R. L. Goodstein.	145
E. Kreysig.	Differentialgeometrie.	T. J. Willmore.	151
E. Kruppa.	Analytische und konstruktive Differentialgeometrie.	T. J. Willmore.	152
R. Kurth.	Introduction to the Mechanics of Stellar Systems.	W. B. Bonnor.	55
C. G. Lambe.	Applied Mathematics for Engineers and Scientists.	E. V. Whitfield.	315
E. Landau.	Elementary Number Theory.	R. L. Goodstein.	231
L. D. Landau and E. M. Lifshitz.	Quantum Mechanics.	A. Weinmann.	305
F. Lessman.	<i>See</i> H. Levy.		
H. Levy and F. Lessman.	Finite Difference Equations.	T. A. A. Broadbent.	311
L. Lewin.	Dilogarithms and Associated Functions.	T. A. A. Broadbent.	312
G. J. Lieberman.	<i>See</i> G. J. Resnikoff.		
E. M. Lifshitz.	<i>See</i> L. D. Landau.		
M. J. Lighthill.	Fourier Analysis and Generalised Functions.	R. L. Goodstein.	226
D. E. Littlewood.	A University Algebra.	Brief Mention.	239
J. E. Littlewood.	The Elements of the Theory of Real Functions.	R. L. Goodstein.	154
R. K. Livesley.	An Introduction to Automatic Digital Computers.	R. L. Goodstein.	76
Lode.	<i>See</i> Baur.		
R. Loveday.	A First Course in Statistics.	F. Conway.	212
Lowry and Hayden.	Advanced Mathematics for Technical Students. Part II.	F. T. Chaffee.	215
R. D. Luce and H. Raiffa.	Games and Decisions.	S. Vajda.	152
H. Lugowski and H. J. Weinert.	Grundzuge der Algebra. Part I. Part II.	R. L. Goodstein.	146 313
W. D. MacMillan.	Statics and Dynamics of a Particle. The Theory of the Potential.	Brief Mention.	320
F. Maeda.	Kontinuierliche Geometrien.	M. F. Atiyah.	233
F. Mandl.	Quantum Mechanics.	D. R. Bates.	71
E. A. Maxwell.	Coordinate Geometry with Vectors and Tensors.	E. J. F. Primrose.	211
D. D. McCracken.	Digital Computer. Programming.	R. A. Brooker.	59
Meyer.	Die Berechnung der Klassenzahl Abel-scher Körper über Quadratischen Zahlkörpern.	H. Heilbronn.	78

AUTHOR.	TITLE.	REVIEWER.	PAGE.
D. S. Meyler and Sir Graham Sutton.	A Compendium of Mathematics and Physics.	T. A. A. Broadbent.	149
S. G. Mikhlin.	Integral Equations and their Applications to certain Problems in Mechanics, etc.	F. Smithies.	156
K. S. Miller.	Elements of Modern Abstract Algebra.	R. L. Goodstein.	146
P. G. Moore.	Principles of Statistical Techniques.	F. Conway.	302
T. Moreno.	Microwave Transmission Design Data.	Brief Mention.	239
W. O. J. Moser.	<i>See</i> H. S. M. Coxeter.		
F. D. Murnaghan.	<i>See</i> J. S. Amos.		
I. P. Natanson.	Theory of Functions of a Real Variable.	R. L. Goodstein.	225
M. A. Neumark.	<i>See</i> I. M. Gelfand.		
J. Nicolle.	La Symétrie.	F. R. Shaw.	66
C. O. Oakley.	Analytic Geometry Problems.	E. J. F. Primrose.	145
W. F. Osgood.	Functions of Real and Complex Variables.	R. L. Goodstein.	231
D. Pedoe.	The Gentle Art of Mathematics.	R. L. Goodstein.	145
A. Pfüger.	Theorie der Riemannschen Flächen.	W. K. Hayman.	74
R. S. Phillips.	<i>See</i> E. Hille.		
S. Piccard.	Sur les bases des groupes d'ordre fini.	K. Hirsch.	149
K. Prachar.	Primzahlverteilung.	E. M. Wright.	71
C. Racine.	Introduction to Abstract Algebra.	E. J. F. Primrose.	151
H. Rademacher and O. Toeplitz.	The Enjoyment of Mathematics.	R. L. Goodstein.	143
H. Raiffa.	<i>See</i> R. D. Luce.		
F. Rehbock.	Darstellende Geometrie.	F. T. Chaffer.	236
K. Reidemeister.	Raum und Zahl.	R. L. Goodstein.	64
G. E. H. Reuter.	Elementary Differential Equations and Operators.	R. L. Goodstein.	140
R. Risser and C. E. Traynard.	Les Principes de la Statistique Mathématiques. Livres I et II.	R. L. Plackett.	157
H. V. Roberts.	<i>See</i> W. A. Wallis.		
M. E. Rose.	Elementary Theory of Angular Momentum.	D. J. Hooton.	314
W. N. Rose.	Mathematics for Engineers. Part II.	Brief Mention.	239
J. Rothstein.	Communication, Organisation and Science.	Brief Mention.	320
M. Salkover.	<i>See</i> E. S. Smith.		
P. Samuel.	<i>See</i> O. Zariski.		
L. Saunders and R. Fleming.	Mathematics and Statistics for use in Pharmacy, Biology and Chemistry.	F. Conway.	54
R. Sauer.	Anfangswert Probleme bei Partiellen Differential Gleichungen.	Brief Mention.	240
J. B. Scarborough.	The Gyroscope. Theory and Applications.	T. A. A. Broadbent.	304

AUTHOR.	TITLE.	REVIEWER.	PAGE.
T. Schneider.	Einführung in die transzendenten Zahlen.	K. Mahler.	158
J. F. Scott.	A History of Mathematics.	M. A. Hoskin.	144
B. Segre.	Some Properties of Differentiable Varieties and Transformations.	M. F. Atiyah.	234
A. Seidenberg.	An Elimination Theory for Differential Algebra.	A. Robinson.	72
K. Semendjagew.	See I. Bronstein.		
F. Severi.	Il Teorema di Riemann-Roch per Curve, Superficie e Varietà: Questioni Collegate.	J. A. Todd.	236
R. G. Shackel.	Concise Physics.	A. J. Moakes.	216
C. L. Siegel.	Vorlesungen über Himmelsmechanik.	W. H. McCrea.	148
W. Sierpinski.	Hypothese du Continu.	R. L. Goodstein.	154
N. B. Slater.	The Development and Meaning of Eddington's Fundamental Theory.	C. W. Kilmister.	53
W. Sluckin.	See T. G. Connolly.		
E. S. Smith, M. Salkover and H. K. Justice.	Calculus.	A. G. Vosper.	137
I. S. Sokolnikoff.	Mathematical Theory of Elasticity.	W. R. Dean.	61
G. Springer.	Introduction to Riemann Surfaces.	W. K. Hayman.	73
K. Strubecker.	Differential Geometrie II, III.	E. J. F. Primrose.	319
Sir Graham Sutton.	See D. S. Meyler.		
K. B. Swaine.	An Introductory Course in Pure Mathematics.	A. W. Bell.	301
J. B. Sykes.	See B. Davison.		
G. Szego.	See U. Grenander.		
Sir Geoffrey Taylor.	The Scientific Papers of Sir Geoffrey Ingram Taylor.	A. E. Green.	225
R. M. Thrall and M. Tornheim.	Vector Spaces and Matrices.	K. Hirsch.	224
E. C. Titchmarsh.	Eigenfunction Expansions associated with Second Order Differential Equations.	E. T. Copson.	308
O. Toeplitz.	See H. Rademacher.		
M. Tornheim.	See R. M. Thrall.		
C. E. Traynard.	See R. Risser.		
A. Tresse.	Théorie Élémentaire des Géométries Non Euclidiennes.	E. J. F. Primrose.	57
S. F. Trustram and H. Whittlestone.	Classbook of Arithmetic and Trigonometry.	B. J. F. Dorrington.	214
S. Valentiner.	Vektoren und Matrizen.	E. J. F. Primrose.	232
A. Wald.	Selected Papers in Statistics and Probability.	F. Downton.	223
R. Walker.	Numerical Trigonometry.	F. E. Chettle.	138

## INDEX

xiii

AUTHOR.	TITLE.	REVIEWER.	PAGE.
A. H. Wallace.	An Introduction to Algebraic Topology. Homology Theory on Algebraic Varieties.	S. Wylie. M. F. Atiyah.	157 233
W. A. Wallis and H. V. Roberts.	Statistics; a new approach.	F. Downton.	150
H. Webb.	Direct Mathematics; I to IV, and Teacher's Book.	K. Sowden.	135
H. Weiler.	Mechanics.	K. S. Snell.	139
J. H. Weinacht	Prinzipien zur Lösung mathematischer Probleme.	H. M. Cundy.	310
H. J. Weinert.	See H. Lugowski.		
D. H. Wheeler.	See M. V. Wilkes.		
H. Whitney.	Geometric Integration Theory.	J. L. B. Cooper.	153
H. Whittlestone.	See S. F. Trustram.		
P. Wijndemes.	Middle-algebra.	R. L. Goodstein.	220
M. V. Wilkes, D. J. Wheeler and S. Gill.	Programmes for an Electronic Digital Computer.	R. A. Brooker.	306
A. P. Wills.	Vector Analysis with an Introduction to Tensor Analysis.	Brief Mention.	320
L. Wittgenstein.	The Blue and Brown Books.	R. L. Goodstein.	231
G. H. von Wright.	The Logical Problem of Induction.	R. L. Goodstein.	69
K. Yano.	The Theory of Lie Derivatives and its Applications.	E. G. Davies.	58
O. Zariski and P. Samuel.	Commutative Algebra, Vol. I.	A. W. Goldie.	238
H. Zassenhaus.	The Theory of Groups.	K. Hirsch.	149
H. Zeisal.	Say it With Figures.	F. Conway.	302
R. Zurmühl.	Praktische Mathematik.	F. T. Chaffey.	237

## TABLES ETC.

H. B. Dwight.	Mathematical Tables.	Brief Mention.	239
C. Faucher.	Tables Trigonométriques.	A. Fletcher.	216
Ph. Lötzbecker.	Vierstellige Tafeln zum Praktischen Rechnen in Unterricht und Beruf.	Brief Mention.	240
R. L. Powell.	See W. M. Rogers.		
W. M. Rogers and R. L. Powell.	Tables of Transport Integrals.	Brief Mention.	239
U.S. Department of Commerce.	Integrals of Airy Functions.	Brief Mention.	239
U.S. Government Printing Office.	Table of Natural Logarithms for Arguments between 5 and 10 to 16 decimal places.	Brief Mention.	240

G. E. Forsythe.	Bibliography of Russian Mathematics Books.	R. L. Goodstein.	63
-----------------	--	------------------	----

## COLLOQUIA, SYMPOSIA AND COLLECTIONS.

Centre Belge de Recherches Mathématiques 1957.			
Colloque d'Algèbre Supérieure Tenu à Bruxelles du 19 au 22 Décembre 1956.	P. M. Cohn.		229
H. T. Davis (Ed.).	'Studies in Differential Equations.'	I. N. Sneddon.	77
M. Dresher, A. W. Tucker and P. Wolfe (Ed.).	Contributions to the Theory of Games. III.	S. Vajda. R. L. Goodstein.	307 144
C. Fadiman (Ed.).	Fantasia Mathematica.		
R. H. Fox, D. C. Spencer and A. W. Tucker (ed.).	Algebraic Geometry and Topology, a Symposium in honour of S. Lefschetz.	J. A. Todd. R. L. Goodstein.	155 144
G. James (Ed.).	The Tree of Mathematics.		
R. K. M. Landshoff (Ed.).	Magnetohydrodynamics.	Brief Mention.	240
L. A. MacColl (Ed.).	Applied Probability.	F. N. David.	220
A. Mercier and M. Kervaire (Ed.).	Jubilee of Relativity Theory.	W. H. McCrea.	147
J. Schwinger (Ed.).	Quantum Electrodynamics.	Brief Mention.	320
H. Weber (Ed.).	Collected Works of Bernhard Riemann.	R. L. Goodstein.	218
	International Symposium on Algebraic Number Theory.	H. Heilbronn.	78
	Proceedings of the First International Conference on Operational Research.	S. Vajda.	224
	Calculus of Variations. Vol. VIII.	Brief Mention.	230

## MISCELLANEOUS.

SUBJECT.	PAGE.
Books for Review.	xiv
Finance Act.	iv a
Foreign Language Translators.	iv
Plate; Professor M. H. A. Newman, F.R.S.	facing page 161
Wanted and for Sale.	20 and 180
Annual General Meeting 1959.	xii
Report of Council for 1958.	ix
The Teaching Committee 1958-1962.	vi